

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10/533,401  
Source: PCT  
Date Processed by STIC: 7/7/06

# ***ENTERED***



PCT

## RAW SEQUENCE LISTING

DATE: 07/07/2006

PATENT APPLICATION: US/10/533,401

TIME: 14:30:40

Input Set : A:\pto.kd.txt

Output Set: N:\CRF4\07072006\J533401.raw

3 <110> APPLICANT: Abbas, Alex  
 4 Bodary, Sarah C.  
 5 Clark, Hilary  
 6 Schoenfeld, Jill  
 7 Wood, William I.  
 8 Wu, Thomas D.  
 10 <120> TITLE OF INVENTION: Compositions and Methods for the Treatment of  
 11 Rheumatoid Arthritis  
 13 <130> FILE REFERENCE: P1998R1-US  
 15 <140> CURRENT APPLICATION NUMBER: US 10/533,401  
 16 <141> CURRENT FILING DATE: 2005-04-28  
 18 <150> PRIOR APPLICATION NUMBER: PCT/US03/36002  
 19 <151> PRIOR FILING DATE: 2003-11-12  
 21 <150> PRIOR APPLICATION NUMBER: US 60/425,931  
 22 <151> PRIOR FILING DATE: 2002-11-12  
 24 <160> NUMBER OF SEQ ID NOS: 209  
 26 <210> SEQ ID NO: 1  
 27 <211> LENGTH: 2984  
 28 <212> TYPE: DNA  
 29 <213> ORGANISM: Homo sapiens  
 31 <400> SEQUENCE: 1  
 32 taactgagcg aggagcaatt gattaatagc tcggcgaggg gactcactga 50  
 34 ctgttataat aacactacac cagcaactcc tggcttccca gcagccggaa 100  
 36 cacagacagg agagagtcag tggcaaatag acatttttct tattttcttaa 150  
 38 aaaacagcaa cttgtttgct actttttatt ctgttgattt ttttttcttg 200  
 40 gtgtgtgtgg tggttgtttt taagtgtgga gggcaaaagg agataccatc 250  
 42 ccaggctcag tccaaccctt ctccaaaacg gcttttctga cactccaggt 300  
 44 agcgagggag ttgggtctcc aggttgtgag aggagcaaat gatgaccgcc 350  
 46 aaggccgtag acaaaatccc agtaactctc agtggttttg tgcaccagct 400  
 48 gtctgacaac atctaccggg tggaggacct cgcgcgcacg tcggtgacca 450  
 50 tctttcccaa tgccgaactg ggaggcccct ttgaccagat gaacggagtg 500  
 52 gccggagatg gcatgatcaa cattgacatg actggagaga agaggtcggt 550  
 54 ggatctccca tatccagca gctttgctcc cgtctctgca cctagaaacc 600  
 56 agaccttcac ttacatgggc aagttctcca ttgacctca gtacctggt 650  
 58 gccagctgct acccagaagg cataatcaat attgtgagtg caggcatctt 700  
 60 gcaaggggtc acttccccag cttcaaccac agcctcatcc agcgtcacct 750  
 62 ctgcctcccc caaccactg gccacaggac ccctgggtgt gtgcaccatg 800  
 64 tcccagaccc agcctgacct ggaccacctg tactctccgc caccgcctcc 850  
 66 tctctcttat tctggctgtg caggagacct ctaccaggac ccttctgcgt 900  
 68 tctgtctcagc agccaccacc tccacctctt cctctctggc ctaccacca 950  
 70 cctccttctt atccatcccc caagccagcc acggaccagc gtctcttccc 1000  
 72 aatgatccca gactatctg gattctttcc atctcagtgc cagagagacc 1050  
 74 tacatggtac agctggccca gaccgtaagc cctttccctg cccactggac 1100

pp 6-7

## RAW SEQUENCE LISTING

DATE: 07/07/2006

PATENT APPLICATION: US/10/533,401

TIME: 14:30:40

Input Set : A:\pto.kd.txt

Output Set: N:\CRF4\07072006\J533401.raw

```

76  accctgcggg  tgccccctcc  actcactcca  ctctctacaa  tccgtaactt  1150
78  taccctgggg  ggccccagtg  ctggggtgac  cggaccaggg  gccagtggag  1200
80  gcagcgaggg  accccggctg  cctggtagca  gctcagcagc  agcagcagcc  1250
82  gccgcgcgcg  ccgcctataa  cccacaccac  ctgccactgc  ggcccattct  1300
84  gaggcctcgc  aagtacccca  acagaccagc  caagacgccg  gtgcacgaga  1350
86  ggccctaccc  gtgcccagca  gaaggctgcg  accggcggtt  ctcccgctct  1400
88  gacgagctga  cacggcacat  ccgaatccac  actgggcata  agcccttcca  1450
90  gtgtcggatc  tgcattgcga  acttcagccg  cagtgaccac  ctcaccaccc  1500
92  atatccgcac  ccacaccggt  gagaagccct  tcgcctgtga  ctactgtggc  1550
94  cgaaagtttg  cccggagtga  tgagaggaag  cgccacacca  agatccacct  1600
96  gagacagaaa  gagcggaaaa  gcagtgcgcc  ctctgcatcg  gtgccagccc  1650
98  cctctacagc  ctctgtctct  gggggcggtg  agcctggggg  taccctgtgc  1700
100 agcagtaaca  gcagcagttc  tggcggaggg  ccgctcgccc  cttgctcctc  1750
102 tcggaccchg  acaccttgag  atgagactca  ggctgataca  ccagctccca  1800
104 aaggccccgg  aggccttttg  tccactggag  ctgcacaaca  aacactacca  1850
106 ccctttcctg  tccctctctc  cctttgttgg  gcaaagggtt  ttggtggagc  1900
108 tagcactgcc  ccccttccac  ctagaagcag  gttcttccta  aaacttagcc  1950
110 cattctagtc  tctcttaggt  gagttgacta  tcaacccaag  gcaaagggga  2000
112 ggctcagaag  gaggtggtgt  ggggatcccc  tggccaagag  ggctgaggtc  2050
114 tgacctgctt  ttaaagggtt  gtttgactag  gttttgctac  cccacttccc  2100
116 cttattttga  cccatcacag  gtttttgacc  ctggatgtca  gagttgatct  2150
118 aagacgtttt  ctacaatagg  ttgggagatg  ctgatccctt  caagtgggga  2200
120 cagcaaaaag  acaagcaaaa  ctgatgtgca  ctttatggct  tgggactgat  2250
122 ttgggggaca  ttgtacagtg  agtgaagtat  agcctttatg  ccacactctg  2300
124 tggccctaaa  atggtgaatc  agagcatatc  tagttgtctc  aacccttgaa  2350
126 gcaatatgta  ttatatactc  agagaacaga  agtgcaatgt  gatgggagga  2400
128 acgtagcaat  atctgctcct  tttcgagttg  tttgagaaat  gtaggctatt  2450
130 ttttcagtgt  atatccactc  agattttgtg  tatttttgat  gtaccacac  2500
132 tgttctctaa  attctgaatc  tttgggaaaa  aatgtaaagc  atttatgatc  2550
134 tcagagggtta  acttatttaa  gggggatgta  catattctct  gaaactagga  2600
136 tgcattgcaat  tgtgttgga  gtgtccttgg  tcgccttgtg  tgatgtagac  2650
138 aaatgttaca  aggttcgatg  taaatgggtt  gccttattat  ggagaaaaaa  2700
140 atcactccct  gagtttagta  tggctgtata  tttatgccta  ttaatatattg  2750
142 gaattttttt  tagaaagtat  atttttgtat  gctttgtttt  gtgacttaaa  2800
144 agtgttacct  ttgtagtcaa  atttcagata  agaattgaca  taatgttacc  2850
146 ggagctgatt  tgtttggtca  ttagctctta  atagttgtga  aaaaataaat  2900
148 ctatttctaac  gcaaaaccac  taactgaagt  tcagatataa  tggatgggtt  2950
150 gtgactatag  tgtaataaaa  tacttttcaa  caat 2984
152 <210> SEQ ID NO: 2
153 <211> LENGTH: 476
154 <212> TYPE: PRT
155 <213> ORGANISM: Homo sapiens
157 <400> SEQUENCE: 2
158 Met Met Thr Ala Lys Ala Val Asp Lys Ile Pro Val Thr Leu Ser
159 1 5 10 15
161 Gly Phe Val His Gln Leu Ser Asp Asn Ile Tyr Pro Val Glu Asp
162 20 25 30
164 Leu Ala Ala Thr Ser Val Thr Ile Phe Pro Asn Ala Glu Leu Gly
165 35 40 45

```

## RAW SEQUENCE LISTING

DATE: 07/07/2006

PATENT APPLICATION: US/10/533,401

TIME: 14:30:40

Input Set : A:\pto.kd.txt

Output Set: N:\CRF4\07072006\J533401.raw

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 167 | Gly | Pro | Phe | Asp | Gln | Met | Asn | Gly | Val | Ala | Gly | Asp | Gly | Met | Ile |
| 168 |     |     |     |     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |
| 170 | Asn | Ile | Asp | Met | Thr | Gly | Glu | Lys | Arg | Ser | Leu | Asp | Leu | Pro | Tyr |
| 171 |     |     |     |     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |
| 173 | Pro | Ser | Ser | Phe | Ala | Pro | Val | Ser | Ala | Pro | Arg | Asn | Gln | Thr | Phe |
| 174 |     |     |     |     | 80  |     |     |     |     | 85  |     |     |     |     | 90  |
| 176 | Thr | Tyr | Met | Gly | Lys | Phe | Ser | Ile | Asp | Pro | Gln | Tyr | Pro | Gly | Ala |
| 177 |     |     |     |     | 95  |     |     |     |     | 100 |     |     |     |     | 105 |
| 179 | Ser | Cys | Tyr | Pro | Glu | Gly | Ile | Ile | Asn | Ile | Val | Ser | Ala | Gly | Ile |
| 180 |     |     |     |     | 110 |     |     |     |     | 115 |     |     |     |     | 120 |
| 182 | Leu | Gln | Gly | Val | Thr | Ser | Pro | Ala | Ser | Thr | Thr | Ala | Ser | Ser | Ser |
| 183 |     |     |     |     | 125 |     |     |     |     | 130 |     |     |     |     | 135 |
| 185 | Val | Thr | Ser | Ala | Ser | Pro | Asn | Pro | Leu | Ala | Thr | Gly | Pro | Leu | Gly |
| 186 |     |     |     |     | 140 |     |     |     |     | 145 |     |     |     |     | 150 |
| 188 | Val | Cys | Thr | Met | Ser | Gln | Thr | Gln | Pro | Asp | Leu | Asp | His | Leu | Tyr |
| 189 |     |     |     |     | 155 |     |     |     |     | 160 |     |     |     |     | 165 |
| 191 | Ser | Pro | Pro | Pro | Pro | Pro | Pro | Pro | Tyr | Ser | Gly | Cys | Ala | Gly | Asp |
| 192 |     |     |     |     | 170 |     |     |     |     | 175 |     |     |     |     | 180 |
| 194 | Leu | Tyr | Gln | Asp | Pro | Ser | Ala | Phe | Leu | Ser | Ala | Ala | Thr | Thr | Ser |
| 195 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |     |     | 195 |
| 197 | Thr | Ser | Ser | Ser | Leu | Ala | Tyr | Pro | Pro | Pro | Pro | Ser | Tyr | Pro | Ser |
| 198 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |     | 210 |
| 200 | Pro | Lys | Pro | Ala | Thr | Asp | Pro | Gly | Leu | Phe | Pro | Met | Ile | Pro | Asp |
| 201 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     | 225 |
| 203 | Tyr | Pro | Gly | Phe | Phe | Pro | Ser | Gln | Cys | Gln | Arg | Asp | Leu | His | Gly |
| 204 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| 206 | Thr | Ala | Gly | Pro | Asp | Arg | Lys | Pro | Phe | Pro | Cys | Pro | Leu | Asp | Thr |
| 207 |     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |
| 209 | Leu | Arg | Val | Pro | Pro | Pro | Leu | Thr | Pro | Leu | Ser | Thr | Ile | Arg | Asn |
| 210 |     |     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |
| 212 | Phe | Thr | Leu | Gly | Gly | Pro | Ser | Ala | Gly | Val | Thr | Gly | Pro | Gly | Ala |
| 213 |     |     |     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |
| 215 | Ser | Gly | Gly | Ser | Glu | Gly | Pro | Arg | Leu | Pro | Gly | Ser | Ser | Ser | Ala |
| 216 |     |     |     |     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |
| 218 | Ala | Ala | Ala | Ala | Ala | Ala | Ala | Ala | Ala | Tyr | Asn | Pro | His | His | Leu |
| 219 |     |     |     |     | 305 |     |     |     |     | 310 |     |     |     |     | 315 |
| 221 | Pro | Leu | Arg | Pro | Ile | Leu | Arg | Pro | Arg | Lys | Tyr | Pro | Asn | Arg | Pro |
| 222 |     |     |     |     | 320 |     |     |     |     | 325 |     |     |     |     | 330 |
| 224 | Ser | Lys | Thr | Pro | Val | His | Glu | Arg | Pro | Tyr | Pro | Cys | Pro | Ala | Glu |
| 225 |     |     |     |     | 335 |     |     |     |     | 340 |     |     |     |     | 345 |
| 227 | Gly | Cys | Asp | Arg | Arg | Phe | Ser | Arg | Ser | Asp | Glu | Leu | Thr | Arg | His |
| 228 |     |     |     |     | 350 |     |     |     |     | 355 |     |     |     |     | 360 |
| 230 | Ile | Arg | Ile | His | Thr | Gly | His | Lys | Pro | Phe | Gln | Cys | Arg | Ile | Cys |
| 231 |     |     |     |     | 365 |     |     |     |     | 370 |     |     |     |     | 375 |
| 233 | Met | Arg | Asn | Phe | Ser | Arg | Ser | Asp | His | Leu | Thr | Thr | His | Ile | Arg |
| 234 |     |     |     |     | 380 |     |     |     |     | 385 |     |     |     |     | 390 |
| 236 | Thr | His | Thr | Gly | Glu | Lys | Pro | Phe | Ala | Cys | Asp | Tyr | Cys | Gly | Arg |
| 237 |     |     |     |     | 395 |     |     |     |     | 400 |     |     |     |     | 405 |
| 239 | Lys | Phe | Ala | Arg | Ser | Asp | Glu | Arg | Lys | Arg | His | Thr | Lys | Ile | His |

## RAW SEQUENCE LISTING

DATE: 07/07/2006

PATENT APPLICATION: US/10/533,401

TIME: 14:30:40

Input Set : A:\pto.kd.txt

Output Set: N:\CRF4\07072006\J533401.raw

```

240          410          415          420
242 Leu Arg Gln Lys Glu Arg Lys Ser Ser Ala Pro Ser Ala Ser Val
243          425          430          435
245 Pro Ala Pro Ser Thr Ala Ser Cys Ser Gly Gly Val Gln Pro Gly
246          440          445          450
248 Gly Thr Leu Cys Ser Ser Asn Ser Ser Ser Leu Gly Gly Gly Pro
249          455          460          465
251 Leu Ala Pro Cys Ser Ser Arg Thr Arg Thr Pro
252          470          475
254 <210> SEQ ID NO: 3
255 <211> LENGTH: 2853
256 <212> TYPE: DNA
257 <213> ORGANISM: Homo sapiens
259 <400> SEQUENCE: 3
260 gctctgctcc aggcactctgc cacaatgtgg gtgcttacac ctgctgcttt 50
262 tgctgggaag ctcttgagtg tgttcaggca acctctgagc tctctgtgga 100
264 ggagcctggg cccgctgttc tgctggctga gggcaacctt ctggctgcta 150
266 gctaccaaga ggagaaagca gcagctggtc ctgagagggc cagatgagac 200
268 caaagaggag gaagaggacc ctctctgcc caccaccca accagcgta 250
270 actatcactt cactcgccag tgcaactaca aatgcggctt ctgtttccac 300
272 acagccaaaa catcctttgt gctgcccctt gaggaagcaa agagaggatt 350
274 gcttttgctt aaggaagctg gtatggagaa gatcaacttt tcagggtggag 400
276 agccatttct tcaagaccgg ggagaatacc tgggcaagtt ggtgaggttc 450
278 tgcaaagtag agttgctggc gccagcgtg agcatcgtga gcaatggaag 500
280 cctgatccgg gagaggtggg tccagaatta tggtagtat ttggacattc 550
282 tcgctatctc ctgtgacagc tttgacgagg aagtcaatgt ccttattggc 600
284 cgtggccaag gaaagaagaa ccatgtggaa aaccttcaa agctgaggag 650
286 gtggtgtagg gattatagag tcgctttcaa gataaattct gtcattaatc 700
288 gtttcaacgt ggaagaggac atgacggaac agatcaaagc actaaacct 750
290 gtccgctgga aagtgttcca gtgcctctta attgaggggtg agaattgtgg 800
292 agaagatgct ctaagagaag cagaaagatt tgttattggg gatgaagaat 850
294 ttgaaagatt ctgggagcgc cacaaagaag tgtcctgctt ggtgcctgaa 900
296 tctaaccaga agatgaaaga ctctacctt attctggatg aatatatgcg 950
298 ctttctgaac tgtagaaagg gacggaagga cccttccaag tccatcctgg 1000
300 atgttggtgt agaagaagct ataaaattca gtggatttga tgaaaagatg 1050
302 tttctgaagc gaggaggaaa atacatatgg agtaaggctg atctgaagct 1100
304 ggattggtag agcggaaagt ggaacgagac ttcaacacac cagtgggaaa 1150
306 actcctagag taactgccat tgtctgcaat actatccgtg tggattttcc 1200
308 cagtggctga aaacctgatt ttctgctgca cgtggcatct gattacctgt 1250
310 ggtcactgaa cacacgaata acttgatag caaatcctga gacaatggaa 1300
312 aaccattaac ttacttcat tggctataa ccttggtgtt attgaaacag 1350
314 cacttctggt tttgagtttg ttttagctaa aaagaaggaa tacacacagg 1400
316 aataatgacc ccaaaaatgc ttagataagg cccctataca caggacctga 1450
318 catttagctc aatgatgcgt ttgtaagaaa taagctctag tgatatctgt 1500
320 gggggcaaaa ttttaatttg atttgatttt ttaaaacaat gtttactgcg 1550
322 atttctatat ttccattttg aaactatttc ttgttcagg tttgttcatt 1600
324 tgacagagtc agtatttttt gccaaatata cagataacca gttttcacat 1650
326 ctgagacatt acaaagtata tgccatcaat atttctgctg gttataatgc 1700
328 tttttttttt ttgcctttat gccattgcag tcttgtactt tttactgtga 1750

```

## RAW SEQUENCE LISTING

DATE: 07/07/2006

PATENT APPLICATION: US/10/533,401

TIME: 14:30:40

Input Set : A:\pto.kd.txt

Output Set: N:\CRF4\07072006\J533401.raw

```

330  tgtacagaaa tagtcaacag atgtttccaa gaacatatga tatgataatc 1800
332  ctaccaatatt tcaagaagtc tctagaaaga gataacacat ggaaagacgg 1850
334  cgtggtgcag cccagccccc ggtgcctggt ccatgaatgc tggctaccta 1900
336  tgtgtgtggt acctgttgtg tccctttctc ttcaaagatc cctgagcaaa 1950
338  acaaagatac gctttccatt tgatgatgga gttgacatgg aggcagtgtc 2000
340  tgcattgctt tgttcgccta tcatctggcc acatgaggct gtcaagcaaa 2050
342  agaataggag tgtagttag tagctggttg gccctacatt tctgagaagt 2100
344  gacgttacac tgggttggca taagatatcc taaaatcacg ctggaacctt 2150
346  gggcaaggaa gaatgtgagc aagagtagag agagtgcctg gatttcatgt 2200
348  cagtgaagcc atgtcaccat atcatatttt tgaatgaact ctgagtcagt 2250
350  tgaaataggg taccatctag gtcagtttaa gaagagtcag ctcagagaaa 2300
352  gcaagcataa gggaaaatgt caggtaaaact agatcaggga acaaaatcct 2350
354  ctccttgttg aaatatccca tgcagtttgt tgatacaact tagtatctta 2400
356  ttgcctaaaa aaaaatttct tatcattggt tcaaaaaagc aaaatcatgg 2450
358  aaaatttttg ttgtccaggc aaataaaagg tcattttaat ttaaaaaaaa 2500
360  aaaaaaaaaa aaaaaaaaaa aaaggccaa ggaaaaaaaa tattcctact 2550
362  taaattttta gtctataatt caatttaaat atgtgtgtgt ctcaccagg 2600
364  ataggatagg ttgtcttcta ttttccattt tacctattta ctttttttgt 2650
366  aagaaaagag aagaatgaat tctaaagatg ttcccatagg gttttgattg 2700
368  tgtctaagct atgatgacct tcatataatc agcataaaca taaaacaaat 2750
370  tttttactta acatgagtgc actttactaa tcctcatggc acagtggctc 2800
372  acgcctgtaa tcccagcact tggggaggac aatgtggggg ggatcacgag 2850
374  gtc 2853

```

376 &lt;210&gt; SEQ ID NO: 4

377 &lt;211&gt; LENGTH: 361

378 &lt;212&gt; TYPE: PRT

379 &lt;213&gt; ORGANISM: Homo sapiens

381 &lt;400&gt; SEQUENCE: 4

```

382  Met Trp Val Leu Thr Pro Ala Ala Phe Ala Gly Lys Leu Leu Ser
383      1          5          10
385  Val Phe Arg Gln Pro Leu Ser Ser Leu Trp Arg Ser Leu Val Pro
386      20          25          30
388  Leu Phe Cys Trp Leu Arg Ala Thr Phe Trp Leu Leu Ala Thr Lys
389      35          40          45
391  Arg Arg Lys Gln Gln Leu Val Leu Arg Gly Pro Asp Glu Thr Lys
392      50          55          60
394  Glu Glu Glu Glu Asp Pro Pro Leu Pro Thr Thr Pro Thr Ser Val
395      65          70          75
397  Asn Tyr His Phe Thr Arg Gln Cys Asn Tyr Lys Cys Gly Phe Cys
398      80          85          90
400  Phe His Thr Ala Lys Thr Ser Phe Val Leu Pro Leu Glu Glu Ala
401      95          100          105
403  Lys Arg Gly Leu Leu Leu Leu Lys Glu Ala Gly Met Glu Lys Ile
404      110          115          120
406  Asn Phe Ser Gly Gly Glu Pro Phe Leu Gln Asp Arg Gly Glu Tyr
407      125          130          135
409  Leu Gly Lys Leu Val Arg Phe Cys Lys Val Glu Leu Arg Leu Pro
410      140          145          150
412  Ser Val Ser Ile Val Ser Asn Gly Ser Leu Ile Arg Glu Arg Trp

```

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/533,401

DATE: 07/07/2006  
TIME: 14:30:41

Input Set : A:\pto.kd.txt  
Output Set: N:\CRF4\07072006\J533401.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:7; N Pos. 127,139,200,202,203,208,209,211,213,216,217,218,219,220,221  
Seq#:7; N Pos. 222,223,224,225,226,227,228,229,230,231,232,233,234,235,236  
Seq#:7; N Pos. 237,238,239,240,241,242,243,244,245,246,247,248,249,250,251  
Seq#:7; N Pos. 252,253,254,255,256,257,258,259,260,261,262,263,264,265,266  
Seq#:7; N Pos. 267,268,269,270,271,272,273,274,275,276,277,278,279,280,281  
Seq#:7; N Pos. 282,283,284,285,286,793,794,795,796,797,798,799,800,801,802  
Seq#:7; N Pos. 803,804,805,806,807,808,809,810,811,812,813,814,815,816,817  
Seq#:7; N Pos. 818,819,820,821,822,823,824,825,826,827,828,829,830,831,832  
Seq#:7; N Pos. 833  
Seq#:8; N Pos. 2086,2087,2088,2089,2090,2091,2092,2093,2094,2095,2096,2097  
Seq#:8; N Pos. 2098,2099,2100,2101,2102,2103,2104,2105,2106  
Seq#:9; Xaa Pos. 52,53,54,55,56,57,58  
Seq#:39; N Pos. 80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99  
Seq#:39; N Pos. 100,101,102,103,104,105,106,107,108,109,110,111,112,113,114  
Seq#:39; N Pos. 115,116,117,118,119  
Seq#:40; Xaa Pos. 27,28,29,30,31,32,33,34,35,36,37,38,39,40  
Seq#:78; Xaa Pos. 103,104  
Seq#:98; N Pos. 1104  
Seq#:100; N Pos. 2173,2174,2175,2176,2177,2178,2179,2180,2181,2182,2183  
Seq#:100; N Pos. 2184,2185,2186,2187,2188,2189,2190,2191,2192,2193,2194  
Seq#:100; N Pos. 2195,2196,2197,2198,2199,2200,2201,2202,2203,2204  
Seq#:127; N Pos. 1169,1170,1171,1172,1173,1174,1175,1176,1177,1178,1179  
Seq#:127; N Pos. 1180,1181,1182,1183,1184,1185,1186,1187,1188,1189,1190  
Seq#:127; N Pos. 1191,1192,1193,1194,1195,1196,1197,1198,1199,1200,1201  
Seq#:127; N Pos. 1202,1203,1204,1205,1206,1207,1208,1209,1210,1211,1212  
Seq#:127; N Pos. 1213,1214,1215,1216,1217,1218,1219,1220,1221,1222,1223  
Seq#:127; N Pos. 1224,1225,1226,1227,1228,1229,1230,1231,1232,1233,1234  
Seq#:127; N Pos. 1235,1236,1237,1238,1239,1240,1241,1242,1243,1244,1245  
Seq#:127; N Pos. 1246,1247,1248,1249,1250,1251,1252,1253,1254,1255,1256  
Seq#:127; N Pos. 1257,1258,1259,1260,1261,1262,1263,1264,1265,1266,1267  
Seq#:127; N Pos. 1268,1269,1270,1271,1272,1273,1274,1275,1276,1277,1278  
Seq#:127; N Pos. 1279,1280,1281,1282,1283,1284,1285,1286,1287,1288,1289  
Seq#:127; N Pos. 1290,1291,1292,1293,1294,1295,1296,1297,1298,1299,1300  
Seq#:127; N Pos. 1301,1302,1303,1304,1305,1306,1307,1308,1309,1310  
Seq#:131; N Pos. 391,392,393,394,395,396,397,398,399,400,401,402,403,404  
Seq#:131; N Pos. 405,406,407,781,782,783,784,785,786,787,788,789,790,791  
Seq#:131; N Pos. 792,793,794,795,796,797,798,799,800,801,802,803,804  
Seq#:158; N Pos. 415,486,585,1119  
Seq#:170; Xaa Pos. 33  
Seq#:204; N Pos. 263,1605,1708,1709,1710,1711,1712,1713,1714,1715,1716,1717  
Seq#:204; N Pos. 1718,1719,1720,1721,1722,1723,1724,1725,1726,1727,1728  
Seq#:204; N Pos. 1729,1730,1731,1732,1733,1734,1735,1736,1737,1738,1739  
Seq#:204; N Pos. 1740,1741,1742,1743,1744,1745,1746,1747,1748,1749,1750  
Seq#:204; N Pos. 1831,1851,1862,1883,1886,1889,3181

RAW SEQUENCE LISTING ERROR SUMMARY

DATE: 07/07/2006

PATENT APPLICATION: US/10/533,401

TIME: 14:30:41

Input Set : A:\pto.kd.txt

Output Set: N:\CRF4\07072006\J533401.raw

Seq#:205; Xaa Pos. 84



## VERIFICATION SUMMARY

PATENT APPLICATION: US/10/533,401

DATE: 07/07/2006

TIME: 14:30:41

Input Set : A:\pto.kd.txt

Output Set: N:\CRF4\07072006\J533401.raw

L:801 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:100  
M:341 Repeated in SeqNo=7  
L:1002 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:2050  
M:341 Repeated in SeqNo=8  
L:1051 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:45  
L:3602 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:50  
M:341 Repeated in SeqNo=39  
L:3643 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:15  
M:341 Repeated in SeqNo=40  
L:6404 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:78 after pos.:90  
L:9015 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:98 after pos.:1100  
L:9175 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100 after pos.:2150  
M:341 Repeated in SeqNo=100  
L:11593 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:127 after pos.:1150  
M:341 Repeated in SeqNo=127  
L:11895 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:131 after pos.:350  
M:341 Repeated in SeqNo=131  
L:14258 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:158 after pos.:400  
M:341 Repeated in SeqNo=158  
L:15433 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:170 after pos.:30  
L:17038 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:204 after pos.:250  
M:341 Repeated in SeqNo=204  
L:17193 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:205 after pos.:75